

ABSTRACT OF THE DISCLOSURE

A DHCP server and a method for allocating an IP address are disclosed. The DHCP server issues an ICMP ping packet when the DHCP server receives an IP address allocation request from a DHCP client. Then, the DHCP server determines whether another host having the IP address exists on a network by determining whether the ICMP ping reply is from the DHCP client requesting the IP address or from another DHCP client. Thereafter, the DHCP server allocates only IP addresses that are not under use. Therefore, even if the network is provided using the DHCP, there will not be any IP address collisions.